

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b>				1. REQUISITION NUMBER R906980695424		PAGE 1 OF 25	
<b>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</b>				5. SOLICITATION NUMBER N00164-98-R-0071		6. SOLICITATION ISSUE DATE 05/07/09	
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		8. OFFER DUE DATE/LOCAL TIME 052798 2:00	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME Ellen Jarosz		b. TELEPHONE NUMBER (No collect calls) (812) 854-5315			
9. ISSUED BY		CODE N00164		10. THIS ACQUISITION IS <input type="checkbox"/> UNRESTRICTED <input checked="" type="checkbox"/> SET ASIDE: 100 % FOR <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISAV. BUSINESS <input type="checkbox"/> 8(A) SIC: 3629 SIZE STANDARD: 500		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE <input checked="" type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	
Contracting Officer NAVSURFWARCENDIV 300 Highway 361 Bldg. 64 Code 1164 Crane, IN 47522-5001						12. DISCOUNT TERMS	
15. DELIVER TO		CODE N00164		16. ADMINISTERED BY		CODE N00164	
Receiving Officer Code 1121 Bldg. 41SE 300 Highway 361 Crane, IN 47522							
17a. CONTRACTOR/OFFEROR		CODE		18a. PAYMENT WILL BE MADE BY DFAS Charleston OPLOC Vendor Pay and Travel Division FPV Box 118054 Charleston, SC 29423-8054		CODE 068892	
TELEPHONE NO.							
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input checked="" type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	See page 2						
				(Attach Additional Sheets as Necessary)			
25. ACCOUNTING AND APPROPRIATION DATA				26. TOTAL AWARD AMOUNT (For Govt. Use Only)			
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDUM <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED				<input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR IS ATTACHED. ADDENDUM <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED			
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN _____ COPIES				29. AWARD OF CONTRACT: REFERENCE _____ OFFER			
<input type="checkbox"/> TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				<input type="checkbox"/> DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)			
30b. NAME AND TITLE OF SIGNER		30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER		31c. DATE SIGNED	
32a. QUANTITY IN COLUMN 21 HAS BEEN <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED				33. SHIP NUMBER PARTIAL FINAL		34. VOUCHER NUMBER	
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE		32c. DATE		36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		37. CHECK NUMBER	
				38. S/R ACCOUNT NUMBER		39. S/R VOUCHER NUMBER	
				42a. RECEIVED BY (Print)		40. PAID BY	
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT				42b. RECEIVED AT (Location)			
41b. SIGNATURE AND TITLE OF IDENTIFYING OFFICER		41c. DATE		42c. DATE REC'D (YY/MM/DD)		42d. TOTAL CONTAINERS	

19 Item No.	20 Schedule of Supplies/Services	21 Qty	22 Unit	23 U. price	24 Amount
0001	Electrochemical Oxidation Waste Disposal System in accordance with (IAW) NSWC Crane Specification dated 4/22/98. Installation, Start-up and Training IAW NSWC Crane Statement of Work dated 4/22/98.	1	EA	\$_____	\$_____
0002	Data, IAW DD1423's	1	LO	NSP	NSP

Continuation of any SF 1449 block in accordance with FAR subparagraph 12.303(b)

Continuation of Block 11 Delivery schedule Page 3

Continuation of Block 19-24 Schedule of Supplies Page 2

SCHEDULE NOTES:

**SPECIAL NOTICE** - The Director, Defense Procurement is proposing to revise the DFARS to require contractors to be registered in the Central Contractor Registration (CCR) as a condition for receipt of contract award. *The effective date would be 01 June 1998.* Exceptions to this proposal include purchases made with the Governmentwide commercial purchase card, contracting officers located outside the United States, classified contracts and contracts executed to support contingency or emergency operations. Contractors may register with the CCR on World Wide Web at <http://www.acq.osd.mil/ec> or via dial up modem at **614-692-6788** (user ID: ccrpub; password: pub2ccr1). A paper form for registration may be requested from the DoD Electronic Commerce Information Center at **1-800-334-3414**.

**EXPEDITING CONTRACT CLOSEOUT (NAVSEA) (DEC 1995)**

(a) As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of \$500 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either party at the end of the contract except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party may be considered to the extent permitted by law.

(b) This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either part associated with collected such small dollar amounts could exceed the amount to be recovered.

List your Commercial and Government (CAGE) Code and Contractor Establishment Code in Block 17a. of Page 1.

BLOCK 11: DELIVERY SCHEDULE AS FOLLOWS:

Delivery is required as follows:

<u>CLIN</u>	<u>QTY</u>	<u>Required Delivery</u>
0001	1 EA	15 September 1998

Accelerated deliveries are acceptable at no additional cost to the Government.

The contractor shall schedule deliveries under this contract to ensure arrival at destination only on Monday through Friday (excluding holidays) between the hours of 7:00 A.M. and 2:00 P.M. Eastern Standard Time. The receiving facility for this material is closed on Saturdays and Sundays.

PLACE OF DELIVERY

The material to be furnished hereunder shall be delivered F.o.b. destination with all transportation charges paid by the supplier to:

RECEIVING OFFICER  
BLDG 41S CODE 1121  
NAVSURFWARCDIV  
CRANE, IN 47522-5011  
Mark For: Code 609 Bldg 3255  
Attn: Mr. Robert Saum x3574

The contractor shall schedule deliveries under this contract to ensure arrival at destination only on Monday through Friday (excluding holidays) between the hours of 7:00 A.M. and 2:00 P.M. Eastern Standard Time. The receiving facility for this material is closed on Saturdays and Sundays.

**Contract Clauses in accordance with FAR subparagraph 12.303©**

Contract Terms &amp; Conditions--Commercial Items (Apr 1998)

52.212-04

**NOTE:** The clause at FAR 52.212-4 has been tailored for this procurement as follows:**ADDENDUM 1**

The following information is added to section (a) of 212-4

**ACCEPTANCE VERIFICATION**

The Government shall accept/reject supplies/services to be provided hereunder within 14 days after installation, start-up and training by the contractor at NAVSURFWARCENDIV.

**The following information is added to section (g) of 212-4****NOTE: Please remit invoices to the address in Box 15 of the Standard Form 1449.**

3) The following paragraph is hereby added to the clause:

(t) *Contractor Performance Reports.* The Government may evaluate the performance of the contractor awarded the contract resulting from this solicitation, in accordance with FAR 42.1500. The following performance rating factors will be utilized:

- Quality
- Timeliness of Performance
- Business Relations
- Customer Satisfaction

Section (o) of 212-4 is modified as follows:

**STANDARD COMMERCIAL WARRANTY (NAVSURFWARCENDIV)**

The contractor shall extend to the Government the full coverage of any standard commercial warranty normally offered in a similar commercial sale, provided such warranty is available at no additional cost to the Government. Acceptance of the standard commercial warranty does not waive the Government's rights under the "Inspection" clause nor does it limit the Government's rights with regard to the other terms and conditions of this contract. In the event of a conflict, the terms and conditions of the contract shall take precedence over the standard commercial warranty. The standard commercial warranty period shall begin upon final acceptance of the applicable material and/or services listed in the Schedule.

The contractor shall provide a copy of its standard commercial warranty (if applicable) with its offer. The warranty covers a period of \\_\\_ months. (Offeror is to insert number.)

Contract Terms & Conditions Required to Implement Statutes or Executive Orders--Commercial Items (APR 1998)  
(FAR 52.212-5)

(a) The Contractor agrees to comply with the following FAR clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

- (1) 52.222-3, Convict Labor (E.O. 11755); and
- (2) 52.233-3, Protest After Award (31 U.S.C. 3553)

(b) The Contractor agrees to comply with the FAR clauses in this paragraph (b) which the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

(Contracting Officer shall check as appropriate)

- ☒ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government, with Alternate I (41 U.S.C. 253g and 10 U.S.C. 2404).
- ☐ (2) Reserved.
- ☒ (3) 52.219-8, Utilization of Small Business Concerns and Small Disadvantaged Business Concerns (15 U.S.C. 637(d)(2) and (3));
- ☐ (4) 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (15 U.S.C. 637(d)(4));
- ☒ (5) 52.219-14, Limitations on Subcontracting (15 U.S.C. 637(a)(14));
- ☒ (6) 52.222-26, Equal Opportunity DEVIATION (E.O. 11246);

--Alternate I (Apr 1984)

- ☒ (7) 52.222-35, Affirmative Action for Disabled and Vietnam Era Veterans (38 U.S.C. 4212);
- ☒ (8) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 739);
- ☒ (9) 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);
- ☐ (10) 52.225-3, Buy American Act--Supplies (41 U.S.C. 10);
- ☐ (11) 52.225-9, Buy American Act--Trade Agreements Act--Balance of Payments Program (41 U.S.C. 10, 19 U.S.C. 2501-2582);
- ☐ (12) RESERVED;
- ☒ (13) 52.225-18, European Union Sanctions for End Products (E.O. 12849);
- ☐ (14) 52.225-19, European Union Sanctions for Services (E.O. 12849);
- ☐ (15) 52.225-21, Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program (41 U.S.C. 10, Pub. L. 103-187);
- (ii) Alt I
- ☐ (16) 52.239-01, Privacy or Security Safeguards (5 U.S.C. 552a);
- ☐ (17) 52.247-64, Preference for Privately Owned U.S. Flag Commercial Vessels (46 U.S.C. 1241);
- Alternate (Apr 1984)

(c) The Contractor agrees to comply with the FAR clauses in this paragraph (c), applicable to commercial services, which the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

(Contracting Officer check as appropriate.)

- ☐ (1) 52.222-41, Service Contract Act of 1965, As amended (41 U.S.C. 351, *et. seq.*);
- ☐ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq.*);
- ☐ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act--Price Adjustment (Multiple Year and Option Contracts) (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq.*);
- ☐ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act--Price Adjustment (29 U.S.C. 206 and 41 U.S.C. 351, *et. seq.*);
- ☐ (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreement (CBA)(41 U.S.C. 351, *et. seq.*).

(d) *Comptroller General Examination of Record.* The Contractor agrees to comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause 52.215-2, Audit and Records--Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c) or (d) of this clause, the Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components--

- (1) 52.222-26, Equal Opportunity DEVIATION (E.O. 11246);
  - (2) 52.222-35, Affirmative Action for Disabled and Vietnam Era Veterans (38 U.S.C. 2012(a)); and
  - (3) 52.222-36, Affirmative Action for Handicapped Workers (29 U.S.C. 793);
  - (4) 52.247-64, Preference for Privately Owned U.S. Flagged Commercial Vessels (46 U.S.C. 1241)(flow down not required for subcontracts awarded beginning May 1, 1996).
- (End of clause)

(a) The Contractor agrees to comply with the Defense Federal Acquisition Regulation Supplement (DFARS) clause 252.247-7023, Transportation of Supplies by Sea, which is included in this contract by reference to implement 10 U.S.C. 2631.

(b) The Contractor agrees to comply with any clause that is checked on the following list of DFARS clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive Orders applicable to acquisitions of commercial items or components.

<input type="checkbox"/>	252.205-7000	Provision of Information to Cooperative Agreement Holders (10 U.S.C. 2416).
<input type="checkbox"/>	252.206-7000	Domestic Source Restriction (10 U.S.C. 2304).
<input type="checkbox"/>	252.219-7001	Notice of Partial Small Business Set-Aside with Preferential Consideration for Small Disadvantaged Business Concerns (____ Alternate I) (Section 9004, Pub. L. 101-165 (10 U.S.C. 2301 (repealed) note)).
<input type="checkbox"/>	252.219-7002	Notice of Small Disadvantaged Business Set- Aside (____ Alternate I) (15 U.S.C. 644).
<input type="checkbox"/>	252.219-7003	Small Business and Small Disadvantaged Business Subcontracting Plan (DoD Contracts) (15 U.S.C. 637).
<input type="checkbox"/>	252.219-7005	Incentive for Subcontracting with Small Businesses, Small Disadvantaged Businesses, Historically Black Colleges and Universities and Minority Institutions (____ Alternate I) (Section 9004, Pub. L. 101-165 (10 U.S.C. 2301 (repealed) note)).
<input type="checkbox"/>	252.219-7006	Notice of Evaluation Preference for Small Disadvantaged Business Concerns (____ Alternate I) (15 U.S.C. 644).
<input checked="" type="checkbox"/>	252.225-7001	Buy American Act and Balance of Payment Program (41 U.S.C. 10a-10d, E.O. 10582).
<input type="checkbox"/>	252.225-7007	Buy American Act--Trade Agreements—Balance of Payments Program (Alternate I)(41 U.S.C.10a-10d, 19 U.S.C.2501-2518 and 19 U.S.C.3301 note).
<input checked="" type="checkbox"/>	252.225-7012	Preference for Certain Domestic Commodities.
<input checked="" type="checkbox"/>	252.225-7014	Preference for Domestic Specialty Metals (10 U.S.C. 2241 note).
<input type="checkbox"/>	252.225-7015	Preference for Domestic Hand or Measuring Tools (10 U.S.C. 2241 note).
<input type="checkbox"/>	252.225-7021	Trade Agreements (____Alternate I)(19 U.S.C.2501-2518 and 19 U.S.C.3301 note).
<input type="checkbox"/>	252.225-7027	Restriction on Contingent Fees for Foreign Military Sales (22 U.S.C. 2779).
<input type="checkbox"/>	252.225-7028	Exclusionary Policies and Practices of Foreign Governments (22 U.S.C. 2755).
<input type="checkbox"/>	252.225-7029	Restriction on Acquisition of Air Circuit Breakers (10 U.S.C. 2534(a)(3)).
<input type="checkbox"/>	252.225-7036	Buy American Act--North American Free Trade Agreement Implementation Act—Balance of Payment Program (____Alternate I)(41 U.S.C.10a-10d and 19 U.S.C. 3301 note).
<input checked="" type="checkbox"/>	252.227-7015	Technical Data--Commercial Items (10 U.S.C. 2320).
<input checked="" type="checkbox"/>	252.227-7037	Validation of Restrictive Markings on Technical Data (10 U.S.C. 2321).
<input checked="" type="checkbox"/>	252.243-7002	Certification of Requests for Equitable Adjustment (10 U.S.C. 2410)'.]
<input type="checkbox"/>	252.247-7024	Notification of Transportation of Supplies by Sea (10 U.S.C. 2631).

(c) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract, the Contractor shall include the terms of the following clause, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014 Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note)  
(End of Clause)

Gratuities (Apr 1984)	52.203-03
Defense Priority and Allocation Requirements (Sep 1990)	52.211-15
Notice of Small Business Set-Aside (Jul 1996)	52.219-6
Toxic Chemical Release Reporting (Oct 1996)	52.223-14
Restrictions on Certain Foreign Purchases (Oct 1996)	52.225-11

**FULL TEXT****NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (FAR 52.211-14) (SEP 1990)**

Any contract awarded as a result of this solicitation will be ( ☐ ) DX rated order; ( ☒ ) DO rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation. [Contracting Officer check appropriate box.]

**Exhibits/Attachments section in accordance with FAR 12.303(d)**

Attachment (1) Specification of Energetic Waste Electrochemical Oxidation Disposal System dated 04/22/98	8 pages
Attachment (2) Statement of Work for Installation, Start-Up and Training dated 22 April, 1998.	3 pages
Attachment (3) Contract Data Requirements List (CDRL) A001, Commercial Off-The-Shelf-manuals	1 page
Attachment (4) Data Item Description DI-TMSS-80527	2 pages

**Provisions section in accordance with FAR 12.303(e)**

Instructions to Offerors -- Commercial Items (Apr 1998) 52.212-1

**NOTE:** The provision at 52.212-1 has been tailored as follows: (See addendum 2 below).

**Addendum 2****52.212-1 Tailoring**

**Paragraph (h) of 212-1, Multiple awards, is hereby deleted.**

**The following information is added to paragraph (b) 10 of 212-1.**

**CONTRACTOR PERFORMANCE DATA (OCT 1995) (NAVSUP)**

The offeror shall demonstrate past performance through completion of the "Contractor Performance Data Sheet". The Contractor Performance Data Sheet shall be completed in its entirety. Data other than that requested on the Contractor Performance Data Sheet will not be considered. Additionally, offerors are urged to submit brief and concise responses, within the confines of the space allotted. *Failure to submit the completed Contractor Performance Data Sheet (along with the proposal) shall be considered certification (by signature on the proposal) that the contractor has no past performance for like or similar items for the Government to evaluate.*

**CONTRACTOR PERFORMANCE DATA SHEET**

**NOTE:** THE INFORMATION PROVIDED MAY BE USED TO EVALUATE THE OFFEROR'S PAST PERFORMANCE IN MEETING COSTS/PRICE, TECHNICAL, AND DELIVERY OBJECTIVES. POINTS OF CONTACT PROVIDED, MAY BE CONTACTED TO CONFIRM INFORMATION PROVIDED AND TO GATHER INFORMATION ON TECHNICAL PERFORMANCE, QUALITY, LIFE CYCLE COST AND/OR RELIABILITY. THE RESULTS MAY BE USED IN THE OVERALL COMPARATIVE EVALUATION OF THE OFFEROR(S) IN ACCORDANCE WITH SECTION M OF THE REQUEST FOR PROPOSAL.

List Performance Data on your five most recently completed Federal Government contracts (not to exceed three years since completion) for like or similar items under this RFP. (If you do not have five Federal Government contracts, then list state, local, or commercial contracts, in that order, to complete this report)

Contractor Name:

RFP #:

Address:

POC: (Person who can verify data)

Telephone:

Division:

FAX:

**CONTRACT INFORMATION**

Contract Number:

Date Completed:

Contract Type: Fixed Price Cost Reimbursement Other (Specify)

Item Description:

Contract Quantity/Length of Service:

Customer Name:

Customer POC: (Person who can verify data)

Address:

Telephone:

FAX:

**QUALITY**

NOTE: An explanation must accompany all answers with an asterisk(\*).

Was consideration or a monetary withhold for non-conforming supplies/services or late deliveries assessed against this contract?

YES\* \_\_\_\_ NO \_\_\_\_ (Explanation)

Was/is any part of this contract terminated for default and/or litigation?

YES\* \_\_\_\_ NO \_\_\_\_ (Explanation)

Was any warranty work completed on delivered items?

YES\* \_\_\_\_ NO \_\_\_\_ (Explanation)

Did you receive any quality awards in the past three years?

YES\* \_\_\_\_ NO \_\_\_\_ (List Awards)

**TIMELINESS**

Were all items (including products, services, reports, etc.) delivered within the original contract schedule?

YES \_\_\_\_ NO \* \_\_\_\_ (Explanation)

**COST**

FOR COST TYPE CONTRACTS:

Was the original contract estimated cost met? YES \_\_\_\_ NO\* \_\_\_\_

(Explanation)

If the estimated cost was not met, what was the positive/negative percentage of change?

+ \_\_\_\_\_ - \_\_\_\_\_

**OTHER PERTINENT INFORMATION**

Describe any corrective action(s) initiated to solve any of the above-described problems/deficiencies on this contract. Discuss the success of the corrective action(s) taken.

**EVALUATION--COMMERCIAL ITEMS (OCT 1995) (FAR 52.212-2)****NOTE:** The provision at 52.212-2 has been tailored (See addendum 3).**52.212-2 Addendum 3**

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

Price and price related factors such as warranty and life cycle costs.\*Past performance

Price and past performance are equally important.

\*Offerors are required to submit with their proposal an estimate of maintenance and operating costs for a one year period.

(b) *Options.* Deleted

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

**PAST PERFORMANCE**

During the source selection process, the Government will assess the offeror's past performance in the evaluation for contract award. Accordingly, each offeror is required to submit a list of its five most recent contracts for the same or similar items. It is preferred that these contracts be with U.S. government customers, but contracts with other commercial concerns are also acceptable. **Offerors are authorized to provide information relative to any problems encountered on the identified**

**contracts and any corrective actions taken by the offeror.** The Source Selection Authority (SSA)/Contracting Officer will evaluate the offeror's past performance; based upon the information furnished by the offeror, or other information obtained by the Contracting Officer. The Contracting Officer is not responsible for locating or securing any information not identified in the offer.

The SSA/Contracting Officer may, however, utilize all available information, including information not provided by the offeror, in the past performance evaluation.



Past performance is assessed by the SSA/Contracting Officer and is assigned a narrative rating in the evaluation. Each offeror will be given an adjectival rating on past performance: highly favorable, favorable, unfavorable, or highly unfavorable. Offerors who do not have same or similar past performance information reasonably available to the Contracting Officer will be rated neither favorably nor unfavorably.

Offerors without corporate past performance history are encouraged to submit past performance information, or key personnel data, previous subcontracting experience, etc. for the Government to evaluate.

In the event there are substantial differences among the offerors in terms of past performance, the Government reserves the right to award to other than the lowest priced offer in favor of an offeror with substantially better performance history. In addition, the Government may accept other than the lowest priced offer if doing so would result in greater value to the Government in terms of technical performance, quality, reliability, life cycle cost, or lower overall program risk. As a part of the past performance evaluation, the Government will assess the offeror's previous compliance with the requirements of FAR 52.219-8 and 52.219-9 as applicable. Small disadvantaged business concerns may receive evaluation preference as provided elsewhere in this solicitation.

#### OFFEROR REPRESENTATIONS AND CERTIFICATIONS COMMERCIAL ITEMS (JAN 1997) (FAR 52.212-3) **DEVIATION**

(a) *Definitions.* As used in this provision:

*"Emerging small business"* means a small business concern whose size is no greater than 50 percent of the numerical size standard for the standard industrial classification code designated.

*"Small business concern"* means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

*"Small disadvantaged business concern"* means a small business concern that --

(1) Is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business, having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and

(2) Has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian organization and which meets the requirements of 13 CFR Part 124.

*"Women-owned small business concern"* means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

*"Women-owned business concern"* means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) *Taxpayer Identification number (TIN)* (26 U.S.C. 6050M). (1) Taxpayer Identification Number (TIN).

☐ TIN: \_\_\_\_\_.

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U. S. and does not have an office or place of business or a fiscal paying agent in the U. S.;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of a Federal, state, or local government;

☐ Other. State Basis. \_\_\_\_\_

(2) Corporate Status.

☐ Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

☐ Other corporate entity;

☐ Not a corporate entity;

☐ Sole proprietorship

☐ Partnership

☐ Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(3) Common Parent.

☐ Offeror is not owned or controlled by a common parent.

/\_/ Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

(c) Offerors must complete the following representations when the resulting contract to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. Check all that apply.

(1) *Small business concern.* The offeror represents as part of its offer that it /\_/ is, /\_/ is not a small business concern.

(2) *Small disadvantaged business concern.* The offeror represents that it /\_/ is, /\_/ is not a small disadvantaged business concern.

(3) *Women-owned small business concern.* The offeror represents that it /\_/ is, /\_/ is not a women-owned small business concern.

**Note:** Complete paragraphs (c)(4) and (c)(5) only if this solicitation is expected to exceed the simplified acquisition threshold.

(4) *Women-owned business concern.* The offeror represents that it /\_/ is, /\_/ is not, a women-owned business concern.

(5) *Tie bid priority for labor surplus area concerns.* If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: \_\_\_\_\_

(6) *Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program.* (Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.)

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it /\_/ is, /\_/ is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

<i>Number of Employees</i>	<i>Average Annual Gross Revenues</i>
----------------------------	--------------------------------------

<input type="checkbox"/> 50 or fewer	<input type="checkbox"/> \$1 million or less
<input type="checkbox"/> 51-100	<input type="checkbox"/> \$1,000,001-\$2 million
<input type="checkbox"/> 101-250	<input type="checkbox"/> \$2,000,001-\$3.5 million
<input type="checkbox"/> 251-500	<input type="checkbox"/> \$3,500,001-\$5 million
<input type="checkbox"/> 501-750	<input type="checkbox"/> \$5,000,001-\$10 million
<input type="checkbox"/> 751-1,000	<input type="checkbox"/> \$10,000,001-\$17 million
<input type="checkbox"/> Over 1,000	<input type="checkbox"/> Over \$17 million

(d) *Certifications and representations required to implement provisions of Executive Order 11246--*

(1) *Previous Contracts and Compliance.* The offeror represents that --

(i) It /\_/ has, /\_/ has not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order 10925, or the clause contained in Section 201 of Executive Order 11114; and

(ii) It /\_/ has, /\_/ has not, filed all required compliance reports.

(2) *Affirmative Action Compliance.* The offeror represents that --

(i) It /\_/ has developed and has on file, /\_/ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It /\_/ has not previously had contracts subject to the written affirmative action programs requirement of

the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions (31 U. S. C. 1352).* (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or

employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) *Buy American Act - Trade Agreements - Balance of Payments Program Certificate.* (Applies only if FAR clause 52.225-9, Buy American Act--Trade Agreement--Balance of Payments Program, is included in this solicitation.)

(1) The offeror hereby certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a

domestic end product (as defined in the clause entitled "Buy American Act--Trade Agreements Balance of Payments Program")

- (2) and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States, a designated country, a North American Free Trade Agreement (NAFTA) country, or a Caribbean Basin country, as defined in section 25.401 of the Federal Acquisition Regulation.
- (2) Excluded End Products:

Line Item No.	Country of origin
_____	_____
_____	_____

(List as necessary)

(3) Offers will be evaluated by giving certain preferences to domestic end products, designated country end products, NAFTA country end products, and Caribbean Basin country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (f)(2) of this provision, offerors must identify and certify below those excluded end products that are designated or NAFTA country end products, or Caribbean Basin country end products. Products that are not identified and certified below will not be deemed designated country end products, NAFTA country end products, or Caribbean Basin country end products. Offerors must certify by inserting the applicable line item numbers in the following:

(i) The offeror certifies that the following supplies qualify as "designated or NAFTA country end products" as those terms are defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program:"

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Insert line item numbers)

(ii) The offeror certifies that the following supplies qualify as "Caribbean Basin country end products" as that term is defined in the clause entitled "Buy American Act--Trade Agreements--Balance of Payments Program":

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Insert line item numbers)

(4) Offers will be evaluated in accordance with FAR Part 25.

(g)(1)*Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program*. (Applies only if FAR clause 52.225-21, Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program, is included in this solicitation.)

(i) The offeror certifies that each end product being offered, except those listed in paragraph (g)(1)(ii) of this provision, is a domestic end product (as defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program" and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States.

(ii) Excluded End Products:

Line item No.	Country of origin
_____	_____
_____	_____

(List as necessary)

(iii) Offers will be evaluated by giving certain preferences to domestic end products or NAFTA country end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (g)(1)(ii) of this provision, offerors must identify and certify below those excluded end products that are NAFTA country end products. Products that are not identified and certified below will not be deemed NAFTA country end products.

The offeror certifies that the following supplies qualify as "NAFTA country end products" as that term is defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program:"

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Insert line item numbers)

(iv) Offers will be evaluated in accordance with Part 25 of the Federal Acquisition Regulation. In addition, if this

solicitation is for supplies for use outside the United States, an evaluation factor of 50 percent will be applied to offers of end products that are not domestic or NAFTA country products.

(2) *Alternate I.* If Alternate I to the clause at 52.225-21 is included in this solicitation, substitute the following paragraph (g)(1)(iii) for paragraph (g)(1)(iii) of this provision:

(g)(1)(iii) Offers will be evaluated by giving certain preferences to domestic end products or Canadian end products over other end products. In order to obtain these preferences in the evaluation of each excluded end product listed in paragraph (b) of this provision, offerors must identify and certify below those excluded end products that are Canadian end products. Products

that are not identified below will not be deemed Canadian end products.

The offeror certifies that the following supplies qualify as "Canadian end products" as that term is defined in the clause entitled "Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program":

---

(Insert line item numbers)

(h) *Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549).* The offeror certifies, to the best of its knowledge and belief, that--

(1) The offeror and/or any of its principals /\_/ are, /\_/ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency, and

(2) /\_/ Have, /\_/ have not, within a three-year period preceding this offer, been convicted of or had a civil judgement rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and /\_/ are, /\_/ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

#### OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (DFAR 252.212-7000) (NOV 1995)

##### (a) *Definitions.*

As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec. 2415).

(2) "United States person" defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concern, as determined under regulations of the President.

##### (b) *Certifications.*

By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec. 2407(a) prohibits a United States person from taking.

(c) *Representation of extent of Transportation by Sea.* (This representation does not apply to solicitations for the direct purchase of ocean transportation services).

(1) The Offeror shall indicate by checking the appropriate blank in paragraph (c)(2) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(2) *Representation.*

The offeror represents that it--

\_\_\_\_\_ Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

\_\_\_\_\_ Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(3) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror

represents that it will not use ocean transportation, the resulting contract will also include the Defense Federal Acquisition Regulation Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

#### CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996) (FAR 52.223-13)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969,

(b) August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned and operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: *(Check each block that is applicable.)*

☐ (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

☐ (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023 (b)(1)(A);

☐ (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

☐ (iv) The facility does not fall within Standard Industrial Certification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulations; or

☐ (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

BUY AMERICAN--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (DEC 1991) (DFARS 252.225-7000)

*(a) Definitions.*

"Domestic end product," "qualifying country," "qualifying country end product," and "nonqualifying country end product" have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

*(b) Evaluation.*

Offers will be evaluated by giving preference to domestic end products and qualifying country end products over nonqualifying country end products.

*(c) Certifications.*

(1) The offeror certifies that--

(i) Each end product, except those listed in paragraphs (c)(2) or (3) of this clause, is a domestic end product; and

(ii) Components of unknown origin are considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(2) The Offeror certifies that the following end products are qualifying country end products:

Qualifying Country End Products

Line Item Number	Country of Origin
(List only qualifying country end products)	

(3) The Offeror certifies that the following end products are nonqualifying country end products:

Nonqualifying Country End Products

Line Item Number	Country of Origin

**Statement of Work**  
**for the**  
**Installation, Initial Start-Up and Training**  
**for an**  
**Energetic Waste**  
**Electrochemical Oxidation**  
**Disposal System**  
**in**  
**Building 3255**  
  
**April 22, 1998**

**1.0 SCOPE:**

1.1 This Statement of Work (SOW) covers the delivery, installation and initial start-up of an Energetic Waste Electrochemical Oxidation Disposal System within Building 3255.

1.2 This SOW also covers training of government personnel on the operation and maintenance of the Energetic Waste Electrochemical Oxidation Disposal System.

**2.0 APPLICABLE DOCUMENTS:**

2.1 Specification for Energetic Waste Electrochemical Oxidation Disposal System, dated April 22, 1998.

**3.0 REQUIREMENTS:**

**3.1 Installation:**

3.1.1 The Contractor shall assemble and install the system inside Building 3255.

3.1.2 The Contractor shall provide all electrical and plumbing connections required to install the system to existing utilities. The Government will make all utility connections to the system.

3.1.3 The contractor shall inform Naval Surface Warfare Center in the contractor's proposal of any site requirements or assistance required and not specified herein.

3.1.4 System installation shall be considered complete when the system has been tested in accordance with the initial start-up requirements of Paragraph 3.2.

**3.2 Initial Start-Up:**

3.2.1 **Schedule:** The Contractor shall perform initial start-up of the system following installation in Building 3255 at NAVSURFWARCENDIV Crane. Installation, start-up and training shall last one week in duration.

3.2.2 **Compliance Demonstration:** Start-up shall be considered successful after demonstrating compliance with the system purchase specification paragraph 4.2, Test Procedures. Government acceptance will be accomplished within fourteen (14) days of successful completion of Compliance Demonstration.

3.2.2.1 **Hydrostatic Integrity Test:** The contractor shall fill the system with water; and, the circulation pumps and liquid heater circuits shall be operated at normal system operating temperature (~ 100°C) for a period of eight(8) hours, shut off for eight(8) hours followed by another eight(8) hours of pump and heater operation. During and immediately following this period of operation, the system shall be checked for leaks. In the event a leak is discovered, the contractor

shall shut down the system and repair the leak.

3.2.2.2 **Destruction Feed Rate Test:** The contractor shall operate the system to demonstrate proper operation in accordance with contractor supplied Operations Manual and Safety Procedures; and, to verify conformance with destruction feed rate requirements of purchase specification Paragraph 3.13.

3.2.3 **Facility Access:** The Contractor will have access to Building 3255 between the hours of 0730 to 1600 Monday through Friday.

3.3 **Training:**

3.3.1 The contractor shall provide training for operators and maintenance personnel following installation of the system at NAVSURFWARCENDIV Crane. Training will be held in building 3255 of NAVSURFWARCENDIV Crane. This may run concurrently with start-up.

3.3.2 Training will be provided for eight (8) to ten (10) scientists, engineers, technicians, and environmental protection and safety personnel who will be responsible for the system's operation and maintenance. The training shall be conducted between the hours of 0730 and 1600 and shall be limited to week-days only.

3.3.3 Training scope shall include operation, safety, programming, preventive maintenance, and trouble-shooting instructions.

3.4 While on NAVSURFWARCENDIV Crane, the Contractor shall abide by all NAVSURFWARCENDIV Crane security, fire, and safety requirements.

**Specification**  
**for**  
**Energetic Waste**  
**Electrochemical Oxidation**  
**Disposal System**

**APRIL 22, 1998**

**1.0 SCOPE**

1.1 This specification establishes performance and test requirements for a pilot system capable of processing hazardous wastes using either the catalyzed electrochemical oxidation (CEO) or mediated electrochemical oxidation (MEO) processes using either cerium or cobalt as a mediator. The system is to be used in a research setting.

1.2 The system shall include an electro-chemical cell, anolyte & catholyte loops for electrolyte circulation through the cell, catholyte regeneration & NO<sub>x</sub> scrubbing system, liquid & gas phase reactors for organic destruction, instrumentation and controls for manual & automated data collection and review, built in condensers for all gas streams, built in electrolyte heaters, pumps, control valves and organic input system, strut structure, Resource Conservation and Recovery Act (RCRA) compliant secondary containment base, and a sonicator.

1.3 The plant must be capable of destroying a wide range of organic compounds including explosives, propellants, rocket fuels, pyrotechnics and industrial solvents.

1.4 Capabilities must include ability to render a waste stream environmentally friendly, ability to treat mixed organic waste, liquid waste, and sludge. The plant shall be capable of processing wastes of two or more materials without adverse effect on safety, plant operation or control. Waste materials shall be broken down into less hazardous constituents such as water, carbon dioxide, environmentally permissible levels of NO<sub>x</sub>, etc.

**2.0 APPLICABLE DOCUMENTS**

2.1 **Non-Government Documents:** The following document forms a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on the date of invitation for bids or request for proposal shall apply.

National Electrical Manufacturer's Association (NEMA) Codes. Application for copies should be addressed to:

National Electrical Manufacturer's Association  
2101 L St. NW  
Washington, D.C. 20037

3.0 **REQUIREMENTS:** The system shall be constructed of commercially available parts.

3.1 **Electrochemical Cell:** Electrochemical cell packs shall consist of a combination of plates totaling 4 kw. Cell packs shall be mechanically fastened with perimeter bolts employing tension springs to maintain uniform loading. Cells shall be designed to be disassembled to allow for cleaning and recoating of the electrodes.

3.1.1 **Function:** The electrochemical cell shall be designed for and capable of producing cerium +4 ions from cerium +3 ions and of producing cobalt +3 ions from cobalt +2 ions.

3.1.2 **Electrodes:** Electrodes shall be coated with 200 micro inches of platinum.

3.2 **Anolyte Recirculation and Supply Loop:** Anolyte solution shall be supplied to the electrochemical cell and the reactor systems from an anolyte storage tank via an anolyte supply pump. Anolyte solution strength shall be monitored by measurement of the electrical conductivity and



periodic sampling for chemical analysis. Anolyte temperature within the tank shall be monitored via a thermocouple. The contractor shall provide K-type thermocouples compatible for use with the Government instrument/display.

Anolyte solution flow rates to the electrochemical cell shall be measured by a paddle type flowmeter equipped with a contractor supplied display and shall be regulated using a manually adjustable valve. Anolyte pressure to the electrochemical cell assembly shall be monitored using an electronic pressure sensor with a chemical seal for sensor protection. The pressure sensor shall have a full scale output of 100 millivolts d.c. and shall be compatible with government supplied test monitor. In addition, differential pressure between the anolyte and catholyte solutions shall be monitored by comparison of the respective absolute pressures.

Heat input into the electrochemical cell system shall be maintained through the use of independent immersion heaters mounted in each of the electrolyte tanks. A temperature measurement thermocouple and a controller shall be supplied for this purpose.

**3.3 Catholyte Recirculation and Supply Loop:** Catholyte solution shall be supplied to the electrochemical cell from the catholyte storage tank via a catholyte supply pump.

Flow rates of catholyte solution to the electrochemical cell shall be regulated by a manually adjustable valve. The flow rate of catholyte will be adjusted based on the differential pressure between the anolyte and catholyte flows into the electrochemical cell assembly. Catholyte absolute pressure entering the electrochemical cell shall be monitored using an electronic pressure sensor isolated with a chemical seal for sensor protection. The differential pressure shall be monitored by comparison of the respective anolyte and catholyte pressure sensors.

Heat input into the electrochemical cell system shall be maintained through the use of independent immersion heaters mounted in each of the electrolyte tanks. A temperature measurement thermocouple and a controller shall be supplied for this purpose.

Catholyte flow returning from the electrochemical cell carries NO<sub>x</sub> gases generated by the electrochemical process. These off gases shall be discharged from the tank and cooled via a water cooled condenser mounted on the vent outlet of the catholyte tank.

Catholyte acid strength shall be monitored by measurement of the conductivity as well as periodic sample and chemical analysis. Conductivity sensors shall have a full scale output of 100 millivolts d.c. and shall be compatible with government supplied test monitor.

**3.4 Cell Assembly and Unit Containment:** The system base shall be constructed to provide Resource Conservation Recovery Act (RCRA) compliant secondary containment for the system. Supporting structures for tanks, reactors and periphery equipment shall be fabricated of fiberglass. Lexan(polycarbonate) panels shall be utilized for mounting instrumentation and as certified general external shields for the unit.

**3.5 Cerium-4 Reactor & Waste Feed System:**

**3.5.1 Waste Organic Feed:** Organic feedstocks shall be metered to the reactor using positive displacement pumps equipped with both stroke and speed adjustment. Liquid or sludge organic shall be supplied to the pump from a graduated cylinder.

**3.5.2 Ultrasonic Mixer:** An ultrasonic mixer shall be utilized to combine the anolyte flow with metered organic flow at the inlet to the ultrasonic chamber. The combined flow shall be routed upward into the sonication cup where the waste organic is exposed to the ultrasonic generator tip. The resultant emulsified mixture is to overflow the cup section and exit the chamber annulus through a bottom side port where it shall be routed to the bottom of the liquid phase reactor.

**3.6 Chemical Reactor Systems:** The organic reactors shall consist of a liquid/sludge phase reactor

and a gas phase reactor. Anolyte solution shall be supplied to the liquid/sludge phase reactor from an anolyte supply pump with flow adjusted via a manual valve. Fresh anolyte solution shall be supplied to the gas phase reactor from the anolyte supply pump. The anolyte flow rate to the gas phase reactor shall be regulated by a manually adjustable valve and monitored by a variable area flow meter.

All reaction off-gases shall be routed through a condenser and cooled to minimize residual water and nitric acid carryover content prior to discharge to the vent system.

**3.7 NO<sub>x</sub> Absorption System:** Nitrogen oxide gases, produced by the cathode reaction of protons with nitric acid, shall be vented from the catholyte supply tank, cooled and routed to the NO<sub>x</sub> absorption columns for recovery of nitric acid. Oxygen gas may be introduced in the incoming NO<sub>x</sub> gas flow to promote the oxidation of NO to NO<sub>2</sub>. Oxygen gas flow shall be set with a manually adjustable regulating valve and monitored by a variable area flow meter.

The NO<sub>x</sub> system shall consist of two absorption columns operated in a series configuration. NO<sub>x</sub> gas shall enter the bottom of the first column to contact a nitric acid solution through the glass raschig ring packed bed. The effluent gas from the first column shall exit the top to be routed to the bottom of the second column where it again will contact a stream of dilute nitric acid in an identical column configuration.

The absorption column nitric acid flow shall be counter to the NO<sub>x</sub> gas flow. Nitric acid shall be routed to the top of both absorption columns where it will fall via gravity through the packing and contact the up-flowing NO<sub>x</sub> gases absorbing NO<sub>2</sub> to form nitric acid. Nitric acid produced from the each absorption column shall be returned to the absorber acid storage tank.

**3.8 Temperature Performance:** The process shall operate in a closed system at ambient temperature and at atmospheric pressure.

**3.8.1 Nominal Operating Temperature:** The nominal operating temperature within the plant circuit shall not exceed 100 degrees Celsius.

**3.9 Size:** The system shall have a footprint no larger than 8'X8' and stand no taller than 10 foot.

**3.10 Electrical:**

**3.10.1 Electrical Schematic:** A complete electrical schematic and full load power requirement shall be provided.

**3.10.2 Supply:** The input power needed to operate the 4 kw cell should require a dc power supply having an output power of no more than 15 volts and 500 amps. Instrumentation, controls, lights, heaters and small motors, etc. shall be 110 volts, single phase, 60 cycle and draw no more than 30 amps.

**3.10.3 Controls:** The contractor shall provide for manual control of the system. Control circuits shall include the necessary relay switches and instruments for proper control of the system. It shall also include the necessary sub circuits with pilot lights and labels for optimum effective operation. The power circuits shall be controlled by heavy-duty contactors and relays, and shall be fused. The contactors used in the heater circuit shall be solid state relays. All switches, relays, and pilot lights shall be mounted in a separate power box located on the side wall of the supporting structure. They shall have labels affixed to identify their function.

The Government will provide its own data acquisition system.

**3.10.4 Electrical Wiring and Components:** All electrical wiring and components shall conform to the standards of the National Electrical Manufacturers Association. Harness wiring shall be used for all control and power circuits.

3.10.5 **Electrical Circuitry Routing:** Electrical circuitry shall be routed and numbered so it can be traced easily during maintenance procedures.

3.11 **Instrumentation:** Complete instrumentation(i.e, thermocouples, relays, heaters, pressure transducers, conductivity sensors, etc.) for automated data collection and review shall be provided by the contractor. Thermocouples and transducers shall be installed in the equipment such that they may be easily connected to the user's data acquisition systems. Operation may be manual. The system shall include metered instrumentation such that data collection may be done visually as well as collected by a data logger or computer.

The government will supply its own PC based data acquisition system to monitor pressure sensors, temperature sensors, conductivity sensors and to control heater relays as well as to monitor and control cell voltage, current and charge.

3.11.1 **Thermocouples:** The system shall be equipped with a minimum of two(2) but not more than ten(10) thermocouples. Thermocouples shall be K-type; leads shall be thirty five (35) feet in length.

3.11.2 **Transducers:** Transducers utilized in this system shall have a voltage output. Up to four(4) transducers may be used.

3.11.3 **Conductivity Sensors:** Conductivity sensors utilized in this system shall have a voltage output. Up to four(4) sensors may be used.

3.11.4 **Relays:** Heater control relays shall operate from twenty four(24) volt d.c. power and draw no more than five(5) amps current.

3.12 **Hydrostatic Integrity:** The system shall not leak when filled with water and the circulation pumps and liquid heater circuits operated at normal system operating temperature(~ 100°C) for a period of eight(8) hours, shut off for eight(8) hours followed by another eight(8) hours of pump and heater operation.

3.13 **Destruction Feed Rates:** A 4kw system shall be capable of destroying the following organic compounds at the feed rates specified.

<b><u>Compound</u></b>	<b><u>Destruction Feed Rates</u></b>
Ethylene Glycol	0.2 (kg/hour)
Propylene Glycol	0.1 (kg/hour)
Nitrobenzoic Acid	--- (kg/hour)
Methanol	0.1 (kg/hour)
Xylene	0.1 (kg/hour)

#### 4. **QUALITY ASSURANCE PROVISIONS:**

4.1 **Precedence:** In the event of conflict in this specification, functional requirements shall take precedence over design or material requirements. The primary acceptance criteria shall be a demonstration of plant operation and its capability of destroying organic compounds in conformance to the performance tests specified in 4.2.

4.2 **Test Procedures:** Once the contractor has installed the system at NSWC Crane, the system shall be tested and checked for conformance to purchase specifications and for proper operation. The contractor will operate the system to demonstrate hydrostatic integrity in accordance with the requirements of Paragraph 3.12; and, will operate the system in both cerium and cobalt mediators to verify the systems's ability to destroy organic compounds at the destruction rates specified in Paragraph 3.13. This demonstration will be accomplished by running at least four baseline compounds including propylene (or ethylene) glycol,

nitrobenzoic acid, methanol, and xylene. All test results including charts, recordings, and checkout data shall remain with the system and become the property of the Government.

5.0 **Documentation:** The contractor shall provide the following documents:

- (1) Process Flow Diagram for both cerium and cobalt mediators (2 Copies).
- (2) Safety Procedures specific to the systems operation (2 Copies).
- (3) Electrical schematic ( 2 Copies).
- (4) Operations Manuals (3 Copies).

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)						Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.							
A. CONTRACT LINE ITEM NO.		B. EXH/ATCH NO.		C. CATEGORY TOP _____ TM _____ OTHER _____			
D. SYSTEM / ITEM			E. CONTRACT / PR NO.		F. CONTRACTOR		
1. DATA ITEM NO.		2. TITLE OF DATA ITEM			3. SUBTITLE		
A001		COMMERCIAL OFF-THE-SHELF(COTS) MANUALS					
4. AUTHORITY (Data acquisition Document No.) DI-TMSS-80527		5. CONTRACT REFERENCE SPEC PARA 5.0			6. REQUIRING OFFICE CODE 609		
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED	10. FREQUENCY OTIME	12. DATE OF FIRST SUBMISSION 10DAC	14. DISTRIBUTION			
8. APP CODE	SEE BLK 16	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION				
16. REMARKS				a. ADDRESSEE			
				b. COPIES DRAFT REG REPO			
<p><b>BLOCK 4 – BLOCK 10 OF DID (DI-TMSS-80527).</b> Delete Paragraphs 10.2 and 10.3. Contractor format is acceptable.</p> <p><b>BLOCK 7 –</b> Submit one Info copy only of LT to: COMMANDER, CODE 1162 BLDG 64 ATT D MACDANIEL, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001</p> <p><b>BLOCK 9 DISTRIBUTION STATEMENT A:</b> Approved for public Release; Distribution is unlimited.</p> <p><b>BLOCK 14 – Addressee List (AL)</b> AL-01 COMMANDER CODE 609 BLDG 2949 ATT B SAUM NAVSURFWARCENDIV 300 HIGHWAY 361 CRANE IN 47522-5001</p> <p>Submit the number of copies as noted in SPEC Para 5.0</p>				SEE BLK 16			
				15. TOTAL			
G. PREPARED BY <i>TMA</i>		H. DATE 15 MAR 98		I. APPROVED BY <i>[Signature]</i>		J. DATE 10 MAR 98	

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

DI-TMSS-80527 TM ■ 9999989 0000678 8 ■

DATA ITEM DESCRIPTION				Form Approved OMB No. 0704-0188	
2. TITLE Commercial Off-the-Shelf (COTS) Manuals			1. IDENTIFICATION NUMBER DI-TMSS-80527		
3. DESCRIPTION/PURPOSE 3.1 Commercial Off-the-Shelf (COTS) manuals contain operation, maintenance, parts lists, and other instructions applicable to equipment designed and manufactured for commercial use.  (Continued on Page 2)					
4. APPROVAL DATE (YYMMDD) 880201		5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) TM		6a. DTIC APPLICABLE	
6b. GIDEP APPLICABLE					
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description (DID) is applicable when (existing) COTS manuals are acquired in order to evaluate their acceptability for Government use.  7.2 COTS manuals are basically acceptable for Government use when they conform to the applicable requirements of 3.1 and 3.2 of MIL-M-7298.  (Continued on Page 2)					
8. APPROVAL LIMITATION			9a. APPLICABLE FORMS		9b. AMSC NUMBER A4320
10. PREPARATION INSTRUCTIONS 10.1 <u>Reference Documents</u> . The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.  10.2 <u>Format</u> . The style and format of Commercial Off-the-Shelf COTS manuals shall be in accordance with 3.1.1 of MIL-M-7298.  10.3 <u>Content</u> . The content of Commercial Off-the-Shelf COTS manuals shall be in accordance with 3.2 of MIL-M-7298.					
11. DISTRIBUTION STATEMENT  DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.					

DD Form 1664, JUN 86

Previous editions are obsolete.

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DI-TMSS-80527

3. DESCRIPTION/PURPOSE (Continued)

3.2 The Government uses COTS manuals to support commercial equipment in a Government commercial or military environment.

7.. APPLICATION/INTERRELATIONSHIP (Continued)

7.3. Basically acceptable COTS manuals may require augmentation by preparation of supplemental data to make them fully acceptable for Government use.

7.4 This DID is related to "Supplemental Data for Commercial Off-the-Shelf (COTS) Manuals", DI-TMSS-80528.

7.5 This DID supersedes DI-M-4022C, DI-M-6153, and DI-TMSS-80385.

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